connected to a static network. In this invention, through local communication and synchronization between an information apparatus and an output device, installation of hardware and software to maintain static network connectivity may not be necessary to enable the rendering of content to an output device.

[0038] According to the several aspects of the present invention there is provided the subject matter defined in the appended independent claims.

[0039] Additional objects and advantages of the present invention will be apparent from the detailed description of the preferred embodiment thereof, which proceeds with reference to the accompanying drawings.

## BRIEF DESCRIPTION OF THE DRAWINGS

[0040] Fig. 1A is a flow diagram of a conventional data output method and its corresponding raster image process in accordance with prior art.

[0041] Fig. 1B is a flow diagram of a second conventional data output method and its corresponding raster image process for an output device that includes a conventional printer controller in accordance with prior art.

[0042] Figs. 2A and 2B are block diagrams illustrating components of an operating environment that can implement the process and apparatus of the present invention.

[0043] Fig. 3A is a schematic block diagram illustrating hardware/software components of an information apparatus implementation in accordance with present invention. The information apparatus includes an operating system.

[0044] Fig. 3% is a second schematic block diagram illustrating hardware/software components of an information apparatus implementation in accordance with present invention.

[0045] Fig. 4A is a block diagram of a conventional printing system or printer with a conventional printer controller.

[0046] Fig. 4B is a block diagram of a second conventional output system or output device.

[0047] Fig. 5A is a schematic block diagram of a printing system or printer with a conventional printer controller and an output controller in accordance with present invention.

[0048] Fig. 5B is a schematic block diagram of a second output system or output device that includes an output controller in accordance with present invention.

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